AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A PLL circuit for use in a super-heterodyne receiver which mixes a received high frequency signal with a local oscillation signal as so to convert the high frequency signal into an intermediate frequency signal, said PLL circuit generating a reference signal, said PLL circuit comprising:

shifting means for shifting a predetermined frequency of a reference signal so as to shift a frequency of the local oscillation signal; and

control means for causing the shifting means to shift the predetermined frequency of the reference signal <u>only</u> in a channel in which interference occurs.

2. (Original) The PLL circuit as set forth in Claim 1, further comprising:

a reference signal oscillating circuit for oscillating the reference signal, wherein the reference signal oscillating circuit includes an oscillating circuit, an oscillator, and an electrostatic capacitor for oscillating;

wherein the shifting means shifts an oscillating frequency of the reference signal frequency oscillating circuit by varying an electrostatic capacitance of the electrostatic capacitor for oscillating.

- (Original) The PLL circuit as set forth in Claim 2, wherein:
 the electrostatic capacitor is a variable capacitor.
- 4. (Original) The PLL circuit as set forth in Claim 1, further comprising:

a reference signal oscillating circuit for oscillating the reference signal, wherein the reference signal oscillating circuit includes (i) an oscillating circuit, (ii) an oscillator, (iii) a first electrostatic capacitor and a second electrostatic capacitor, which are for oscillating and are connected to each other in parallel, (iv) a switch for connecting and

Docket No : 1248-0701P

Docket No : 1248-0701P

disconnecting the second electrostatic capacitor to and from the first electrostatic capacitor,

wherein:

the control means causes the switch to open or close, so as to shift the oscillating frequency of the reference signal oscillating circuit.

5. (Currently Amended) A television receiver comprising a PLL circuit for use in a super-heterodyne receiver which mixes a received video RF signal with a local oscillation signal so as to convert the video RF signal into a video IF signal, said PLL circuit generating a reference signal,

wherein the PLL circuit includes (i) shifting means for shifting a predetermined frequency of a-the reference signal so as to shift a frequency of the local oscillation signal and (ii) control means for controlling the shifting means to shift the prescribed frequency of the reference signal in a channel in which interference occurs, and

wherein the television receiver uses a video IF frequency of 45.75 MHz, and a video RF frequency of 91.25 MHz in the channel in which interference occurs.

6. (Original) The television receiver as set forth in Claim 5, further comprising:

a reference signal oscillating circuit for oscillating the reference signal, wherein the reference signal oscillating circuit includes an oscillating circuit, an oscillator, and an electrostatic capacitor for oscillating,

wherein the shifting means shifts the oscillating frequency of the reference signal frequency oscillating circuit by varying an electrostatic capacitance of the electrostatic capacitor for oscillating.

3

7. (Currently Amended) A beat reducing method for a television receiver which includes a PLL circuit for generating a reference signal and mixes a received high frequency signal with a local oscillation signal so as to convert the high frequency signal into an intermediate frequency signal, comprising the steps of:

shifting a reference signal frequency in a PLL circuit for a channel in which interference occurs; and

shifting a local oscillating frequency in accordance with the reference signal frequency so shifted, so as to shift an interfering spurious frequency of an intermediate frequency signal.

8. (Currently Amended) A PLL circuit for use in a super-heterodyne receiver which mixes a received high frequency signal with a local oscillation signal so as to convert the high frequency signal into an intermediate frequency signal, said PLL circuit generating a reference signal, comprising:

a shifting circuit for shifting a predetermined frequency of a-the reference signal so as to shift a frequency of the local oscillation signal; and

a control circuit for causing the shifting circuit to shift the predetermined frequency of the reference signal in a channel in which interference occurs.

9. (Currently Amended) A PLL circuit for use in a super-heterodyne receiver which mixes a received high frequency signal with a local oscillation signal so as to convert the high frequency signal into an intermediate frequency signal and for outputting a local oscillating signal, comprising:

a reference signal oscillating circuit for oscillating a reference signal used to determine a frequency of the local oscillating signal, wherein the reference signal oscillating circuit includes (i) an oscillating circuit, (ii) a shifting circuit for shifting a predetermined frequency of the reference signal oscillated by the oscillating circuit, (iii)

Docket No.: 1248-0701P

Application No. 10/781,672 Amendment dated April 23, 2007 Reply to Office Action of January 23, 2007

a control circuit for causing the shifting circuit to shift the predetermined frequency of the reference signal in a channel in which interference occurs.

10. (Currently Amended) A television receiver using a video IF frequency of 45.75 MHz and adapted to output an output signal related to an input signal having an input signal frequency, said television receiver mixing a received video RF signal with a local oscillation signal so as to convert the video RF signal into a video IF signal comprising a PLL circuit for use in a super-heterodyne receiver, said PLL circuit generating a reference signal, wherein the PLL circuit includes a shifting circuit for shifting a predetermined frequency of a reference signal only when the frequency of the input signal is about 91.25 MHz.

5

Docket No.: 1248-0701P